

Amendment to the Claims

21. (Currently Amended) A method for continuous or semi-continuous casting of metal, the method comprising:

providing at least one direct chill mold having a mold cavity that is provided with an inlet linked to a metal store and an outlet having devices for directly cooling the metal so that an object in the form of ~~an extended a strand~~string, ~~extrusion~~-ingot or wire bar can be cast through the outlet; supplying metal to the mold from the metal store via a metal supply system that is sealed from the environment; and

regulating, by means of counter-pressure, the gas pressure over a metal level in the mold in relation to the metallostatic pressure in the mold, such that the metallostatic pressure ~~of~~at the metal in a contact point against the mold at the metal solidification zone in the mold is virtually zero during casting.

22. (Previously Presented) A method in accordance with claim 21, wherein the metal supply system comprises a duct extending between the mold and an intermediate reservoir, the duct communicates with a vacuum reservoir through a connection stub, and the intermediate metal reservoir is arranged at a lower level than the duct, the method further comprising:

supplying metal to the intermediate metal reservoir via a valve device, wherein the supplying of metal to the intermediate reservoir is regulated by the valve device in order to achieve a siphon effect through the duct,

wherein the metal level in the intermediate metal reservoir is the same as or slightly higher

than the metal level in the mold cavity in the mold, and the counter pressure in the mold during casting is equivalent to atmospheric pressure.

23. (Previously Presented) A method in accordance with claim 21, wherein the metal supply system comprises a distribution chamber communicating with the mold and an intermediate reservoir, the distribution chamber is connected to a vacuum reservoir through a connection stub, and the intermediate metal reservoir is arranged at a lower level than the duct, the method further comprising:

supplying metal to the intermediate metal reservoir via a valve device, wherein the supplying of metal to the intermediate reservoir is regulated by the valve device in order to achieve a siphon effect through the distribution chamber,

wherein the metal level in the intermediate metal reservoir is the same as or slightly higher than the metal level in the mold cavity in the mold, and the counter pressure in the mold during casting is equivalent to atmospheric pressure.

24. (Previously Presented) A method in accordance with claim 21, wherein the mold includes a chill that is provided with permeable wall elements for the supply of gas and/or oil to the metal solidification zone.

25. (Currently Amended) Equipment for continuous or semi-continuous casting of metal, the equipment comprising:

a metal store;

at least one direct chill mold having a mold cavity provided with an inlet linked to the metal store and an outlet provided with devices for cooling the metal so that an object in the form of ~~an extended string~~ a strand, extrusion-ingot or wire bar can be cast through the outlet,

a metal supply system disposed between the metal store and the inlet of the mold, wherein the metal supply system is sealed from the environment; and

counter-pressure means for regulating the gas pressure over the metal level in the mold in relation to the metallostatic pressure in the mold such that the metallostatic pressure of the metal in a contact point against the mold at the metal solidification zone is virtually zero during casting.

26. (Currently Amended) The equipment as claimed in claim 25, wherein the metal supply system comprises a distribution chamber having a connection stub in communication with a vacuum reservoir, the counter-pressure means ~~equipment further~~ comprising:

an intermediate metal reservoir arranged at a lower level than the distribution chamber; and
a valve device positioned in an inlet of the intermediate metal reservoir, wherein the supply of metal to the intermediate metal reservoir can be regulated so as to achieve a siphon effect via the distribution chamber, wherein the metal level in the intermediate metal reservoir is virtually the same as or slightly higher than the metal level in the mold cavity in the mold, and the counter-pressure in the mold during casting is equivalent to atmospheric pressure.

27. (Currently Amended) The equipment as claimed in claim 25, wherein the metal supply

system comprises a duct having a connection stub in communication with a vacuum reservoir, the counter-pressure means equipment further comprising:

an intermediate metal reservoir arranged at a lower level than the duct; and
a valve device positioned in an inlet of the intermediate metal reservoir, wherein the supply of metal to the intermediate metal reservoir can be regulated so as to achieve a siphon effect via the duct, wherein the metal level in the reservoir is virtually the same as or slightly higher than the metal level in the mold cavity in the mold, and the counter-pressure in mold during casting is equivalent to atmospheric pressure.

28. (Previously Presented) The equipment as claimed in claim 25, wherein the mold includes a chill that is of the hot-top type and comprises permeable rings or wall elements for the supply of gas and/or oil to a metal solidification zone.

29. (Previously Presented) The equipment as claimed in claim 26, wherein the intermediate metal reservoir has an open top, and the distribution chamber is sealed by a lid.

30. (Previously Presented) The equipment as claimed in claim 27, wherein the intermediate metal reservoir has an open top, and communicates with the duct via a vertical inlet pipe.